**Product Name:** **HIRA (phospho Thr555) Rabbit Polyclonal Antibody**
**Catalog #:** **APRab04771**
For research use only.

## Summary

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| **Description** | Rabbit polyclonal Antibody |
| **Host** | Rabbit |
| **Application** | WB,IHC,ICC/IF,ELISA |
| **Reactivity** | Human,Mouse |
| **Conjugation** | Unconjugated |
| **Modification** | Phosphorylated |
| **Isotype** | IgG |
| **Clonality** | Polyclonal |
| **Form** | Liquid |
| **Concentration** | 1mg/ml |
| **Storage** | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| **Shipping** | Ice bags |
| **Buffer** | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| **Purification** | Affinity purification |

## Application

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|---|---|
| **Dilution Ratio** | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000 |
| **Molecular Weight** | |

## Antigen Information

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|---|---|
| **Gene Name** | HIRA |
| **Alternative Names** | HIRA; DGCR1; HIR; TUPLE1; Protein HIRA; TUP1-like enhancer of split protein 1 |
| **Gene ID** | 7290.0 |
| **SwissProt ID** | P54198 |
| **Immunogen** | The antiserum was produced against synthesized peptide derived from human HIRA around the phosphorylation site of Thr555. AA range:521-570 |

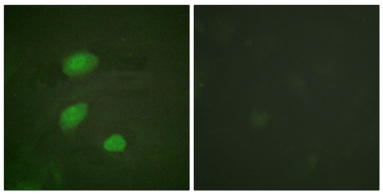
## Background

This gene encodes a histone chaperone that preferentially places the variant histone H3.3 in nucleosomes. Orthologs of this

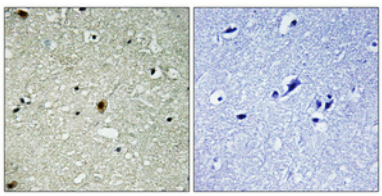
gene in yeast, flies, and plants are necessary for the formation of transcriptionally silent heterochomatin. This gene plays an important role in the formation of the senescence-associated heterochromatin foci. These foci likely mediate the irreversible cell cycle changes that occur in senescent cells. It is considered the primary candidate gene in some haploinsufficiency syndromes such as DiGeorge syndrome, and insufficient production of the gene may disrupt normal embryonic development. [provided by RefSeq, Jul 2008],developmental stage:Expressed during embryogenesis.,disease:May play a part in the etiology of the DiGeorge syndrome (DGS), a developmental disorder due to an abnormal development of the third and fourth pharyngeal pouches. The clinical features include absence or hypoplasia of the thymus and parathyroid glands, cardiovascular malformations, facial dysplasia, a cleft palate and mental retardation.,function:Cooperates with ASF1A to promote replication-independent chromatin assembly. Required for the periodic repression of histone gene transcription during the cell cycle. Required for the formation of senescence-associated heterochromatin foci (SAHF) and efficient senescence-associated cell cycle exit.,PTM:Phosphorylated by CDK2/CCNA1 and CDK2/CCNE1 on Thr-555 in vitro. Also phosphorylated on Thr-555 and Ser-687 in vivo.,PTM:Sumoylated.,similarity:Belongs to the WD repeat HIR1 family.,similarity:Contains 8 WD repeats.,subcellular location:Primarily, though not exclusively, localized to the nucleus. Localizes to PML bodies immediately prior to onset of senescence.,subunit:Interacts with histone H3F3B, PAX3 and PAX7 (By similarity). Interacts with CCNA1, HIRIP3, NFU1/HIRIP5 and histone H2B. Part of a complex which includes ASF1A, CABIN1, histone H3.3, histone H4 and UBN1.,tissue specificity:Expressed at high levels in kidney, pancreas and skeletal muscle and at lower levels in brain, heart, liver, lung, and placenta.,

## Research Area

## Image Data



Immunofluorescence analysis of HeLa cells, using HIRA (Phospho-Thr555) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.